Digital Signage Touch Panel

User Manual

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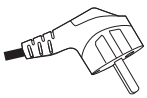
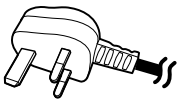
Safety Instructions

Use the following safety guidelines to help protect yourself and your Digital Signage Touch Panel (DSTP).

- Do not attempt to service DSTP yourself. Always follow installation instructions closely.
- To avoid personal injury from electric shock or fire:
  - Completely power down DSTP when cleaning the device, its components, or chassis, or performing operations requiring similar steps. To do this, first turn the power off, then disconnect the AC adapter from the electrical outlet or from any other type of external power source.
  - Do not operate DSTP near water, for example, near a kitchen sink or laundry tub, in a wet basement, by a swimming pool, or in the rain.
  - Do not push objects into air vents or openings of DSTP. Doing so can short out interior components and may cause fire or electric shock.
- Operate DSTP at the recommended temperature range of +0°C to +40°C (+32°F to +104°F). Store it at a temperature of -10°C to +60°C (+14°F to +140°F).

Power Cord & Adapter Warnings

- See the Installation Instructions before connecting to the power supply.
- Be sure that the power outlet you plug the power cord into is easily accessible and located as close to the equipment operator as possible.
- When using your power cord, make sure to position it around objects so it is not cut or punctured.
- Use only the power cord provided for use with this DSTP in accordance with the table below.

Plug Type		
Country	EU (except U.K.)	U.K.
Voltage	230	230

***** When operating DSTP with its AC 125-240V power supply, use a power supply cord that matches the power supply voltage of the AC power outlet being used.

- Before you connect DSTP to a power source, ensure that the voltage rating of the AC adapter matches that of the available power source.

  - 115 V/60 Hz in most of North and South America and some Far Eastern countries such as South Korea and Taiwan.
  - 100 V/50 Hz in eastern Japan and 100 V/60Hz in western Japan.
  - 230 V/50 Hz in most of Europe, the Middle East, and the Far East.
  - If you use an extension cable with your AC adapter, ensure that the total ampere rating of the products plugged in to the extension cable does not exceed the ampere rating of the extension cable.
- Do not cover the AC adapter with papers or other items that may reduce cooling; also, do not use the AC adapter while it is inside a carrying case.
- To remove power from DSTP, turn it off and disconnect the AC adapter from the electrical outlet.
- The plug is the disconnecting device.

Warranty

We warrant that each of our products will be free from material and workmanship defects for one year from the date of purchase. If the customer discovers a defect, contact your dealer. Defective products will be repaired or replaced at no charge to the customer, provided it is returned during the warranty period of one year. This warranty does not apply to any products which have been repaired or altered by persons other than authorized repair personnel, or which have been subject to misuse, abuse, accident or improper installation. We assume no liability under the terms of this warranty as a consequence of such events.

Technical Support

For technical support and service, please contact your dealer or visit the website indicated at the back of the warranty card.

Declaration of Conformity

CE Marking

This product complies with the principal elements of the safety objectives of EMC Directive (2004/108/EEC) and the Low Voltage Directive (2006/95/EC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

- EN55022 (CISPR 22). Electromagnetic Interference
- EN55024 (IEC61000-4-2,3,4,5,6,8,11). Electromagnetic Immunity
- EN61000-3-2. (IEC61000-3-2)-Power Line Harmonics
- Digital Signage Touch PanelEN61000-3-3. (IEC61000-3-3)-Power Line Flicker
- EN60950-1 (IEC60950-1). Product Safety

WEEE Notice

- The Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) which entered into force on 13th February 2003, is to ensure that WEEE are recycled using best available treatment, recovery and recycling techniques in order to protect human health and natural resources.
- Recycling & disposal:
  - Do not dispose of your product which has the WEEE logo (shown as right) on it or on its box in the general household waste bin.
  - Be sure to dispose of all your products in the designed collection facilities for recycling of such hazardous wastes.
  - Separate collection and proper recovery of your WEEE at the time of disposal will allow us to help conserve natural resources. Moreover, proper recycling of WEEE will ensure safety of human health and environment.

For more information about WEEE disposal, recovery, and collection points, please contact your local city center, household waste disposal service, retailer, or manufacturer of the equipment.

Introduction

Overview

Thank you for purchasing your Digital Signage Touch Panel (DSTP). DSTP is a powerful digital engine for high quality video and graphics. It can perform live broadcasts, video/ audio files, and display tickers. You can easily control, deliver, and receive multimedia content through a network. Easily update and change display contents in real time by connecting to the server.

Multiple zones and layouts make this product capable of creating vivid and captivating multimedia content to attract more attention.

DSTP uses standard media files, providing a reliable and easy-to-use platform.

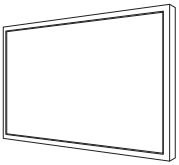
Read this chapter to learn more about the features of DSTP.

Features

- **High Performance.** 1680 x 1050 output with hardware video/audio decoder, supports 2 video/ 2 graphic/ 2 tickers.
- **Sleek design.** The sleek panel design makes it easy to mount and install.
- **Network-Manageable.** DSTP can connect remotely to a local or wide area network via wired, wireless, or 3G connections.
- **Web setting.** Use your Internet browser to set up DSTP through the web interface.
- **Versatile Connection.** DSTP can connect to the network via Ethernet, Wireless, or 3G connection.
- **Content-rich presentation.** Supports most standard media files for a content-rich presentation.
  Video: WMV, MPEG1, MPEG2, MPEG4, VC-1
  Audio: WAV, MP3, WMA, M4A
  Graphics: BMP, JPEG, PNG
  Ticker: Text, RSS
- **Multi zone layout.**This feature allows you to create vivid and more attractive presentations.
- **Composite Video input (for DVD/TV).** DSTP supports composite video input for DVD and TV.
- **Standard storage.** DSTP uses an SD card for local storage.
- **Fanless design.**

Package Content

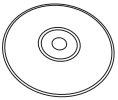
When unpacking, please ensure the following items are included. If any items are missing or damaged, please contact your retailer.



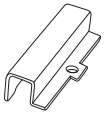
Digital Signage Touch Panel (DSTP)

Quick Start Manual

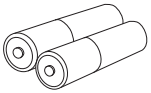
Remote Control



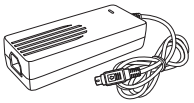
CD ROM



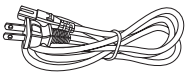
SD Card Protector



AA Battery x 2

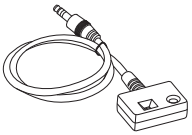


Power Adapter



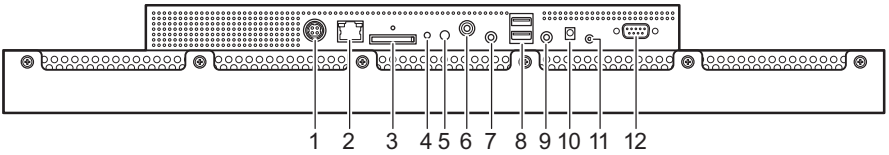
Power Cord

SD Card 2GB



Wired IR (optional)
3M™ double-sided tape
4032 22 mm x 14 mm (optional)

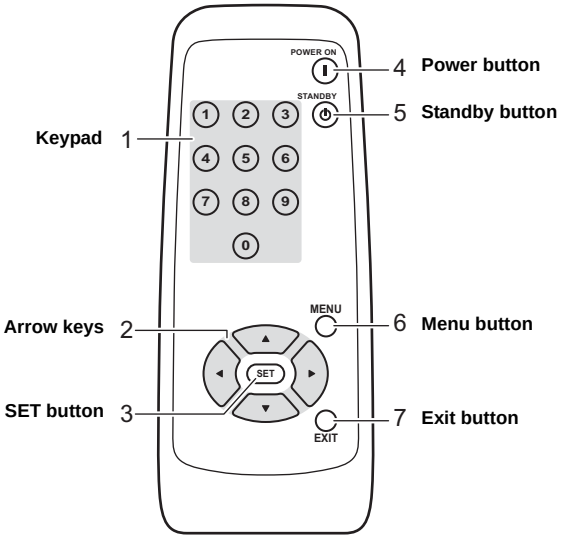
Connectors View



No.	Item	Description
1	Power socket	Use to connect to the power adapter.
2	LAN	Use to connect to an Ethernet network.
3	SD card slot	Use to insert the SD card.
4	Power button	Press to turn DSTP on or off.
5	LED indicator	Indicates the status of DSTP.
6	Video In	Use to connect to a composite video source like a DVD player, set-top box, etc.
7	Audio Out	Use to connect to an external device such as TV line-in or speakers.
8	USB port	Use to connect a USB flash drive for updating content/system driver.
9	Audio In	Use to connect to an external device such as a DVD player or a set-top box
10	IR Sensor	Receives incoming remote control commands.
11	Wired IR jack	Use to connect to a wired IR.
12	RS232 port	Use to connect to an RS232 cable.

Remote Control

DSTP comes with a remote control to access menu settings. The diagram and table below show the keys and basic operation of the remote control.



No,	Item	Description
1	Keypad	Press the keys to enter numeric values.
2	Arrow keys	Press to navigate through menu selections.
3	SET button	Press to enter or confirm selection.
4	Power button	Press to power up DSTP.
5	Standby button	Press to power off DSTP.
6	Menu button	Press to display the on-screen display (OSD) Menu.
7	Exit button	Press to exit the menu or submenu options.

Getting Started

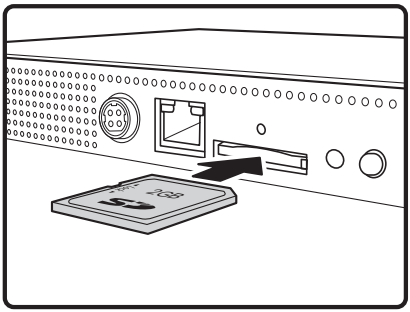
Setting up New SD Card Content

You need to set up the contents of the SD card before using it for the first time. The sample media files and system drivers (libxxx.img) for the SD card content can be found in the included CD-ROM. Use your PC to copy these sample files to the SD card.

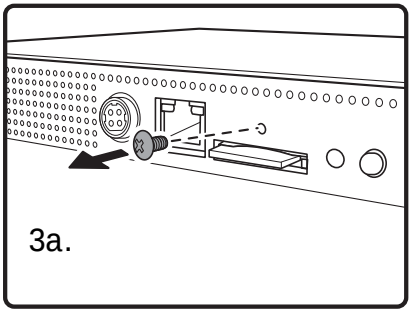
Inserting the SD Card

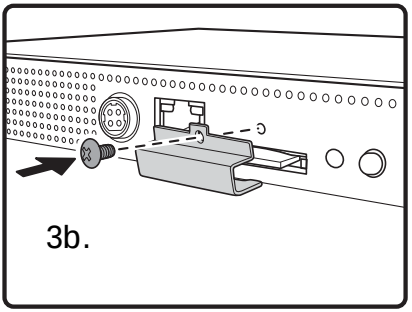
Before using DSTP, you must insert an SD Card. You can use SD cards up to 16 GB in size.

1. Insert the SD card in the card slot with the contacts facing the front panel of DSTP.



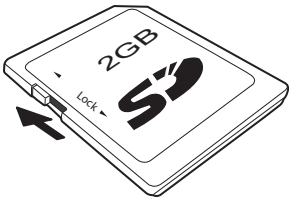
2. Slide it until it clicks into place.
3. To protect the SD card from damage or accidental loss, screw the SD card protector onto the case. Refer to the following diagrams.





Note In order to avoid update function failure, do not lock the SD card.

Write protect lock set to correct position



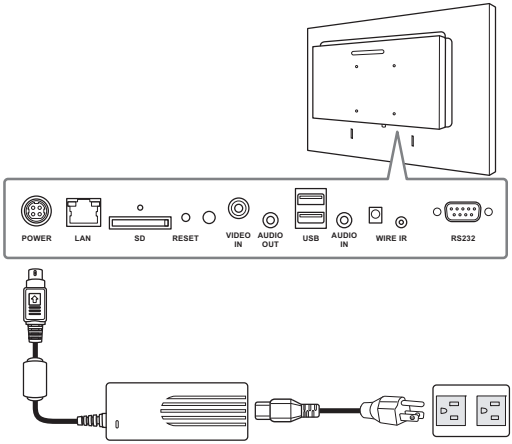
Removing the SD Card

1. Unscrew the SD card protector from the case.
2. Gently push the SD card in until it clicks to release the lock.
3. Remove the card.
4. Screw the SD card protector back.

Making Connections

Connecting the Power

1. Connect the power cord to the adapter.

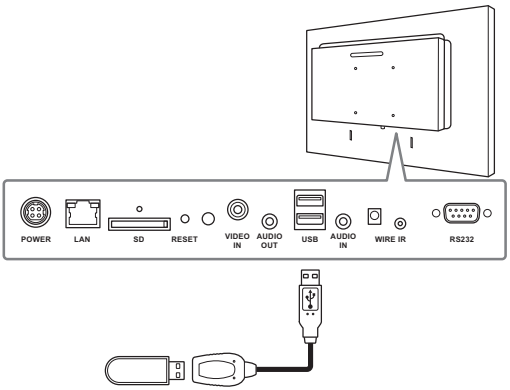


2. Connect the power adapter to the power socket of DSTP.
3. Plug the power cord to a live outlet.

Connecting USB devices

You can connect a USB flash drive using the USB port for content file updates or system upgrades.

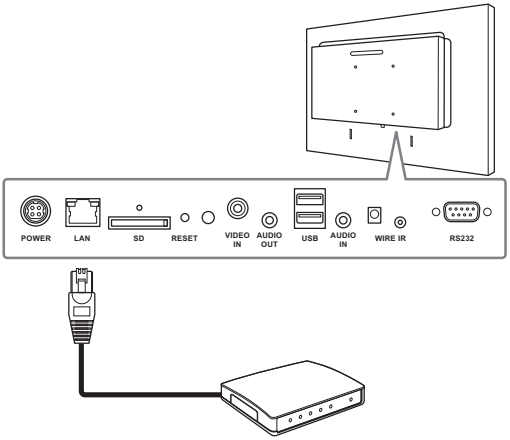
Simply plug in the USB flash drive to the USB port of DSTP or use a USB extension cable for easy access and connection.



Connecting to a Network

For rapid content file updates, connect to InfoSAP Touch via local area network.

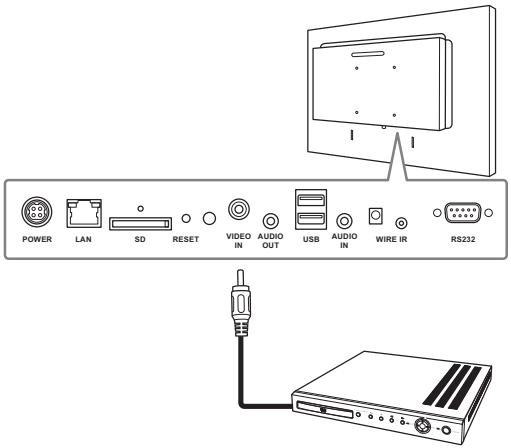
Connect one end of an Ethernet cable to the LAN port on DSTP and the other end to a network hub or wall socket.



Connecting a DVD player or a TV Set-Top Box

For vivid media content, you can play back video files directly from your DVD player or a TV set-top box.

1. Connect the video cable to the Video-in port of DSTP.



2. Connect the other end to a DVD player or a TV set-top box.
3. Select **Composite Through Out** in the Play Mode menu. See “Play Mode” on page 21 for details.

Note

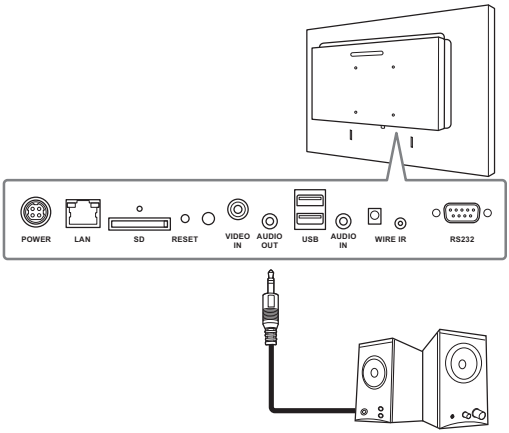
Media content must be edited first using InfoSAP Touch (see the InfoSAP Touch user manual for more details).

Connecting an Audio In Component

DSTP supports Audio-in component from devices such as a DVD player or a set-top box.

Connecting Speakers

For a more attention-grabbing display, DSTP is capable of playing audio files.
Connect speakers using the stereo jack on your device.



Note

Audio files must be edited first using InfoSAP Touch (see the InfoSAP Touch user manual for more details).

Powering On

Note Before powering on DSTP, insert an SD card into the SD card slot.

After performing the necessary connections, you are now ready to power on DSTP. Press POWER ON on the remote control. The LED indicator lights green to denote power.

Boot Sequence

When you turn on DSTP, it checks the memory drives connected to your device in a particular order, this is called the Boot Sequence.

In Slideshow mode, the boot sequence of DSTP is as follows:

1. Checks the USB port for USB flash drive device.
2. Checks the SD card content.

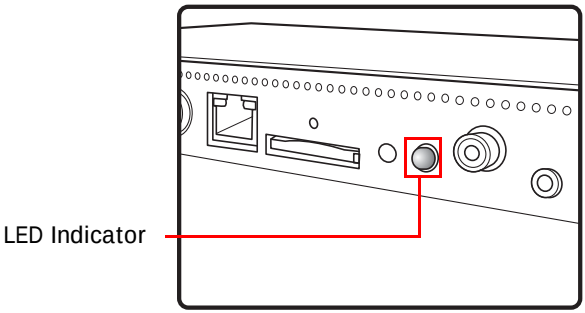
Note When you accidentally turn on DSTP without an SD card inserted in the device, a "No Signal" message appears on the screen. Press STANDBY on the remote control, insert the memory drive, then press POWER ON to reboot the device again.

Powering Off

To turn off DSTP, press STANDBY on the remote control. The LED indicator lights red to denote standby mode.

LED Indicator

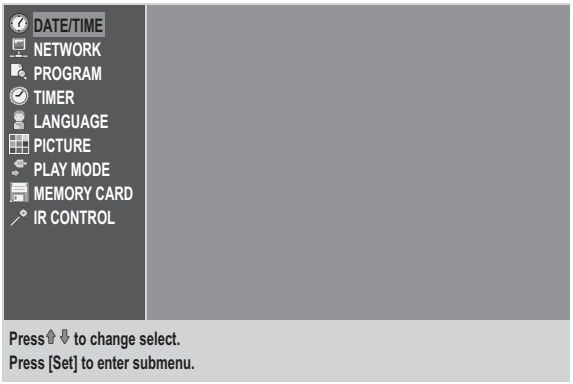
The LED indicator indicates the status of DSTP.



LED Indicator	Status
Green	Power is on
Red	On standby mode
Green, blinking	Preparing to standby

Menu

The main menu consists of menu options for DSTP. Press MENU on the remote control to activate the main menu.



- Press the Up/Down arrow keys to move through the menu.
- Press SET to enter a menu item.
- To exit a menu, press EXIT .
- To exit the main menu, press MENU or EXIT .

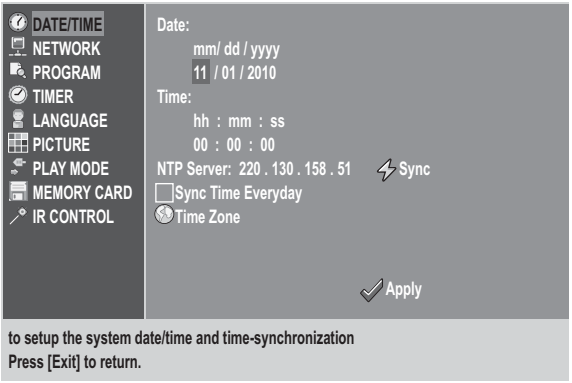
Date and Time

In the **Date/Time** menu, you can:

- Manually set the date and time of DSTP
- Sync the date and time via Network Time Protocol (NTP)
- Enable/Disable daily synchronization to NTP
- Set the Time Zone

To set the date and time:

1. Press MENU > **DATE/TIME**.



2. Use the arrow keys on the remote control to move through the selections.
3. Press the keypad to enter numeric values.
4. Select **Apply** to save and apply changes.

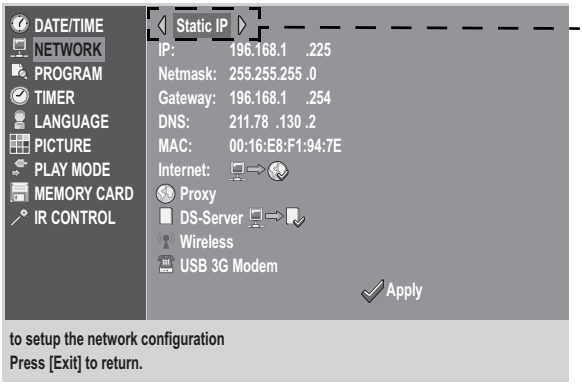
Network

You can update the contents of your SD card by connecting to InfoSAP Touch via network or via DS Server if installed.
The **Network** menu allows you to configure how you want DSTP to connect to the network.

- DHCP
- Static IP
- Proxy
- Wireless connection
- 3G connection

By default, the network is set to DHCP. If you have a DS Server running, DSTP connects periodically with the server to report current status or settings. You can also remotely control DSTP from DS server (see the DS Server user manual for more details).

Press MENU > **NETWORK**.



DHCP or Static IP

1. Select the connection type:
   - **DHCP**: To acquire network configuration automatically.
   - **Static IP:** Enter **IP**, **Netmask**, **Gateway**, and **DNS** manually.
2. Use the arrow keys on the remote control to move through the selections.
3. Press the keypad to enter numeric values.
4. Select **Apply** to save and apply changes.

Proxy

Select **Proxy** to set the proxy IP address and port number.

DS-Server

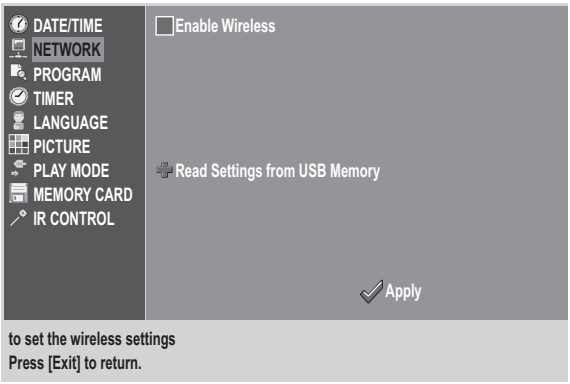
Select **DS-Server** to set the DS-Server IP address and port number.

Wireless

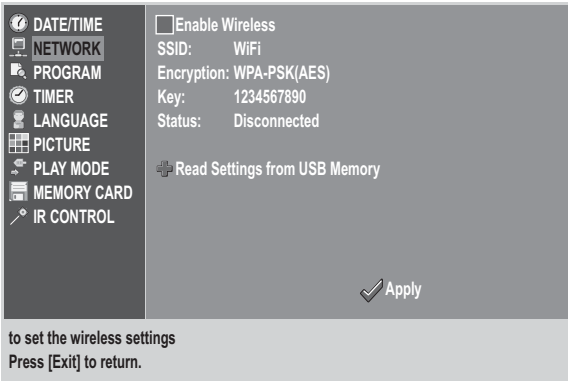
Select **Wireless** to connect to the network via wireless connection.

To do the following steps to establish a wireless connection:

1. Create a configuration file using the Wireless/3G Config Setting tool. (See *" Wireless/3G Config Setting" on page 36*).
2. Copy the configuration file to a USB flash drive.
3. Insert the USB flash drive to the USB port of DSTP.
4. On the remote control, press MENU > **NETWORK** > **Wireless**.
5. Highlight **Enable Wireless**, then press SET.



6. Highlight **Read Settings from USB Memory**, then press SET. DSTP reads the configuration file from the USB flash drive and displays the settings on the screen.



7. Select **Apply**.

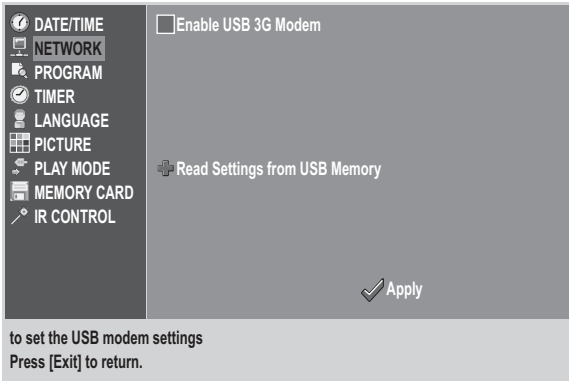
8. When prompted, select **Yes** to confirm network by wireless.

USB 3G Modem

Select **USB 3G Modem** to connect to the network via dial-up connection.

To do the following steps:

1. Create a configuration file using the Wireless/3G Config Setting tool. (See *" Wireless/3G Config Setting" on page 36*).
2. Copy the configuration file to a USB flash drive.
3. Insert the USB flash drive to the USB port of DSTP.
4. On the remote control, press MENU > **NETWORK** > **USB 3G Modem**.
5. Highlight **Enable USB 3G Modem**, then press SET.



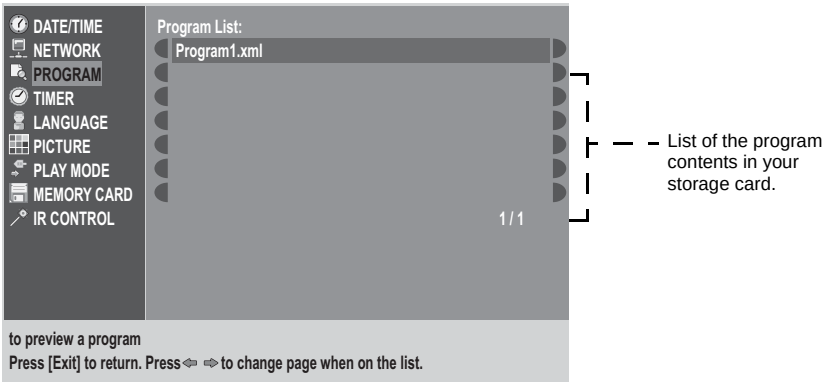
6. Highlight **Read Settings from USB Memory**, then press SET. DSTP reads the configuration file from the USB flash drive and displays the settings on screen.
7. Select **Apply**.
8. When prompted, select **Yes** to confirm network connection by 3G.

Program

The **Program** menu lists the program contents in the SD card. The programs are listed in order of filename. You can select a program to preview.

To preview a program:

1. Press MENU > **PROGRAM**.



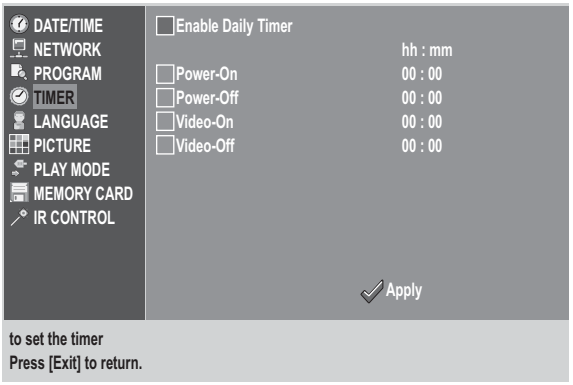
2. Use the up and down keys to move through the program list.
3. Use the left and right keys to go to the next or previous page.
4. Press SET to select and play the file.

Timer

You can set the timer settings of DSTP in the **Timer** menu. You can:

- Enable daily timers
- Set timers to power on or power off your device
- Set timers to turn the video on or off

1. Press MENU > **TIMER**.

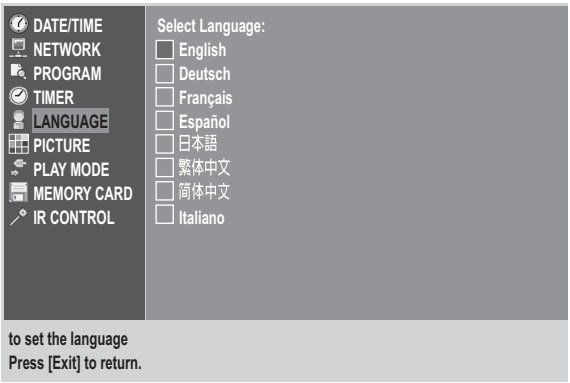


2. Use the arrow keys to move through the options.
3. Press SET to enable a timer.
4. Use the keypad to enter numeric values.
5. Select **Apply** to save and apply changes.

Language

The default on-screen display language of DSTP is English. You can change the language in the **Language** menu. English, German, French, Spanish, Italian, Japanese, Traditional Chinese, and Simplified Chinese are supported.

1. Press MENU > **LANGUAGE**.

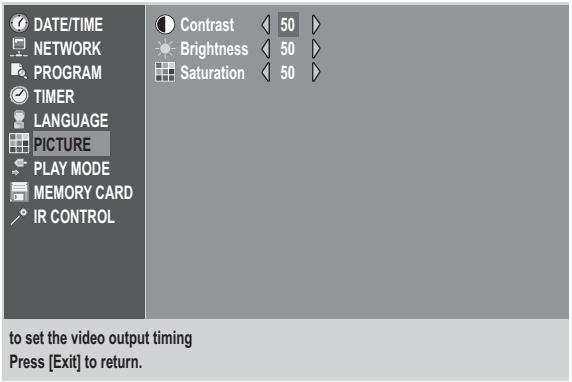


2. Use the arrow keys to move through the options.
3. Press SET to select the language.

Picture

In the **Picture** menu, you can adjust the contrast, brightness, and saturation settings

1. Press MENU > **PICTURE**.

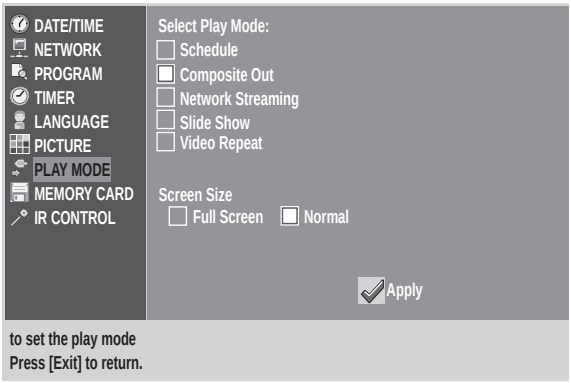


2. Use the up and down keys to move through the options.
3. Use the left and right keys to adjust the setting.
4. Press SET to save and apply the setting.

Play Mode

You can select the play mode in the Play Mode menu.

1. Press MENU > **PLAY MODE**.



2. Use the arrow keys on the remote control to move through the options.
3. Press SET to highlight an option.
4. Select **Apply** to apply the mode.

Note

Do not unplug the USB flash drive or the SD card during Play Mode. In case this happens, go to Standby mode and reboot DSTP. See “Playing media files using a USB flash drive” on page 31.

Schedule

Schedule is the default mode. Select **Schedule** to play a program with scheduling function.

Note

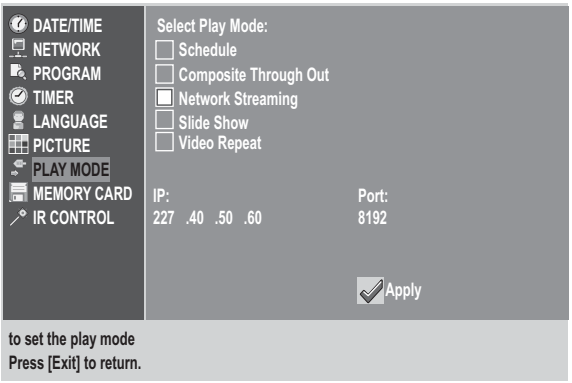
Use InfoSAP Creator to use the Schedule function.

Composite Out

Select **Composite Out** to playback video files directly from your DVD player or a TV set-top box.

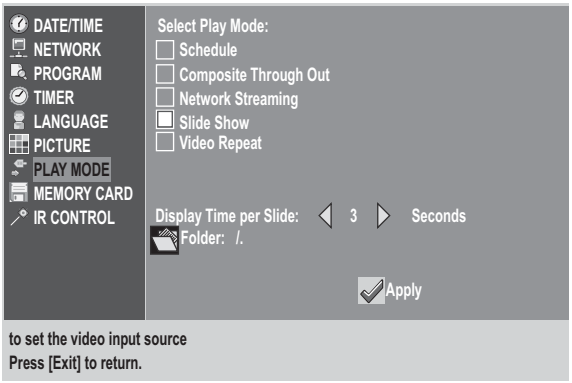
Network Streaming

Select **Network Streaming** to stream video files through the network**.** Configure the streaming server by entering the server **IP** and **Port** address.



Slide Show

Select **Slide Show** to play a slide show of image files from the USB flash drive.



Use the arrow keys to set the display time of each slide from 3 to 60 seconds. The default value is set to 3 seconds.

Note

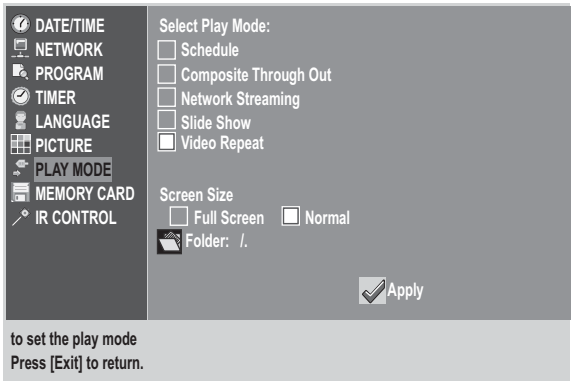
The system needs to restart before the Slide Show mode settings can take effect.

When you power on DSTP in slide show mode, your device checks the USB flash drive and read image files to start the slide show. The following image files are supported: BMP, JPEG, PNG. The images are resized to full screen while retaining the aspect ratio. The slide show is played in alphabetical order of the file name and played repeatedly.

Note If there is no USB flash drive detected, DSTP displays a message **Please insert USB memory**.

Video Repeat

You can also select **Video Repeat** mode to play video files from the USB flash drive repeatedly.



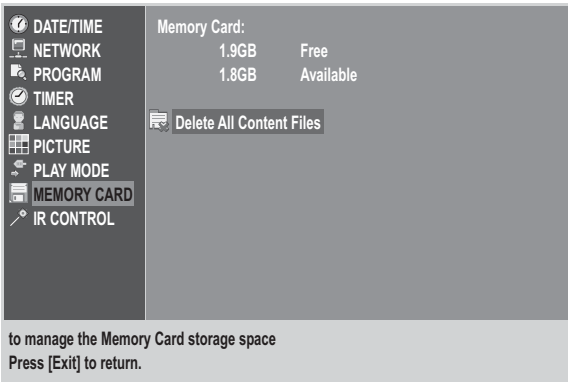
When you power on DSTP in video repeat mode, the device checks the USB flash drive and reads video files to play. If there is no USB flash drive detected, it displays a message **Please insert USB memory**.

Note The system needs to restart before the Video Repeat mode settings can take effect.

Memory Card (SD Card)

You can see the capacity of your SD card and delete all stored content in the **Memory Card** (SD card) menu.

Press MENU > **MEMORY CARD** (SD card).



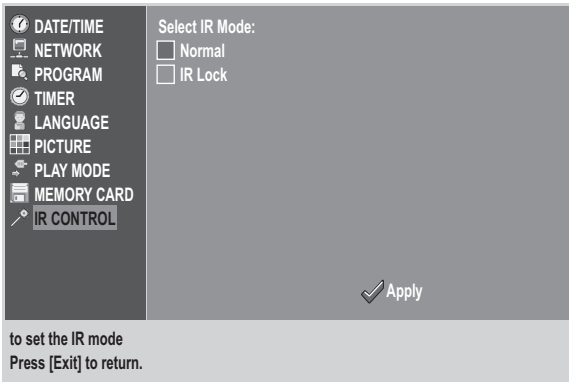
Note

Choosing "Delete All Content Files" deletes all content files in your SD card. The SD card must have a system driver and a running project in its "media" folder. If you delete all the content files in the SD card, the panel will not work.

IR Control

IR Control refers to the remote control that is included with DSTP. In the **IR Control** menu, you can lock the remote control to prevent unauthorized users from operating your device.

Press MENU > **IR CONTROL**.



To lock the remote control

1. Highlight **IR Lock** using the arrow keys on the remote control.
2. Press SET to select.
3. Select **Apply**.
4. A message appears to confirm disabling of remote control. Select **Yes** to confirm.

To unlock the remote control

1. Press the keys on your remote control in the following order:

MENU 1 2 3

2. The message “OSD Menu Unlock” is displayed on the screen to confirm unlocking of the remote control.

Hidden Menu

The Hidden Menu is used to upgrade the contents of your storage device, display system settings, change passwords and restore factory defaults. To protect the contents and settings

of DSTP, the Hidden Menu is not displayed on the screen unless you activate it.

There are two levels of Hidden Menu: simple and complex. In the simple hidden menu, only the system driver can be upgraded. In the complex hidden menu, you can upgrade the system driver, loader, kernel, and splash.

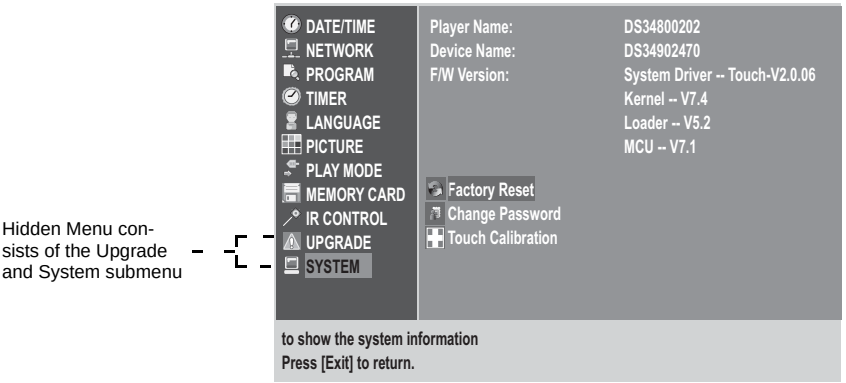
To display the simple Hidden Menu, press the keys in the following order:

To display the complex Hidden Menu, press the keys in the following order:

The Hidden Menu consists of two menus:

- Upgrade
- System

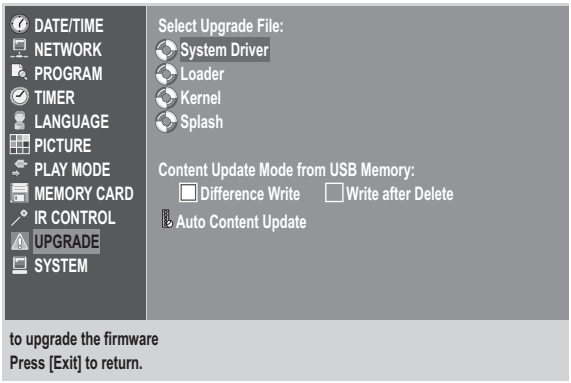
The picture below shows the activated hidden menus.



To deactivate the Hidden Menu, turn off DSTP. The Hidden Menu is not displayed on the screen on your next power up.

Upgrade

Press MENU > **UPGRADE**.

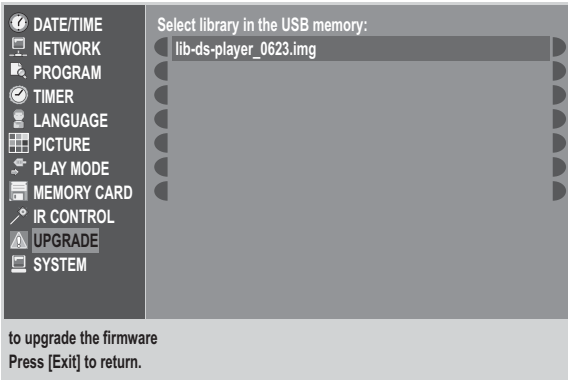


Use the **Upgrade** menu to upgrade system files in DSTP. DSTP contains four files: System driver, Loader, Kernel, and Splash. To select an item, use the arrow keys on the remote control to highlight an item, then press SET.

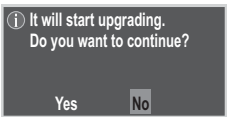
Upgrading the System Driver

1. Select the file to update by moving the arrow keys to highlight the file then press SET.
2. Insert the USB flash drive to the USB port. DSTP automatically checks the USB flash drive for updated files. If no file is found, a “no file” message appears on the screen. Otherwise, the screen displays a list of available system drivers.

Please refer to the picture below.



3. Select the system driver, then press SET .
4. When the message appears on the screen, select "Yes" and press SET to start.



5. DSTP starts upgrading and displays a message.

6. When the upgrade is complete, a message appears on screen and DSTP reboots.

Content Update Mode from USB Flash Drive

Set up the content update mode in this section. Select **Difference Write** or **Write after Delete**.

When DSTP boots up, it checks the USB flash drive first.

If you select **Difference Write**, only files with different time/date stamps or new files included on the USB flash drive but are not on the SD card are updated. Files on the SD card but are not on the USB flash drive are deleted.

If you select **Write after Delete**, all content files in the media folder are deleted. The content files in the USB flash drive are then copied to the SD card.

Auto Content Update

Select Auto Content Update to enable or disable daily auto content update. Once enabled, the following detail configuration is displayed:

- **FTP server/Folder**: The content directory on FTP.
- **User**: The user name to login to FTP.
- **Password**: The password to login to FTP.
- **Time**: The daily update time.

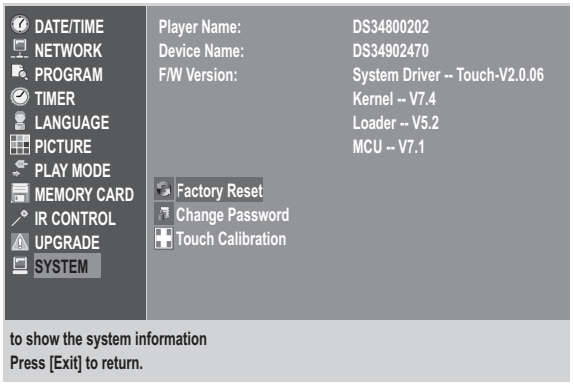
For more information about auto content update configuration, see the InfoSAP Touch user manual.

System

The System menu displays system settings and manages setup options. You can:

- Reset DSTP to its factory settings.
- Change the password for web access.
- Calibrate DSTP.

Press MENU > **SYSTEM**.



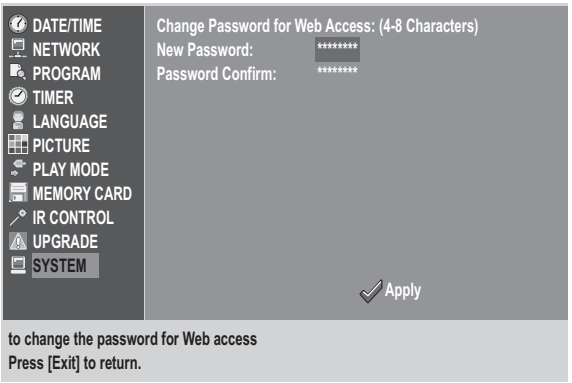
Factory Reset

When you select **Factory Reset**, a confirmation message appears. Select **Yes** to continue.

Warning All settings are erased if you select Factory Reset.

Change Password

A password is required for web access. To set up a password, select **Change Password**.



The password must be a 4 to 8-character numeric string.

1. Enter a new password.
2. Re-enter to confirm the new password.
3. Select **Apply**.

Note Make sure the New Password and Password Confirm are the same to ensure successful change of password.

Touch Calibration

Select **Touch Calibration** to calibrate the touch panel for accuracy. A series of dots will appear on screen.

Touch the dots to calibrate the touch panel.

How to Use the Digital Signage Processor

Playing media files on the SD card

1. Insert an SD card into the SD card slot.
2. Turn on DSTP. The device boots up.
3. If there is a playlist in the SD card, DSTP plays the program content. Otherwise, the screen displays the message, “There is no schedule program at current time”.

Note Please refer to the InfoSAP Touch user manual for more information about playing content files on the SD card.

Playing media files using a USB flash drive

By default, if **Slide Show** mode is enabled, DSTP reads the USB flash drive first for media content when it boots up.

1. Insert the USB flash drive in the USB slot.
2. Turn on DSTP.

The content of your memory drive is displayed on the screen.

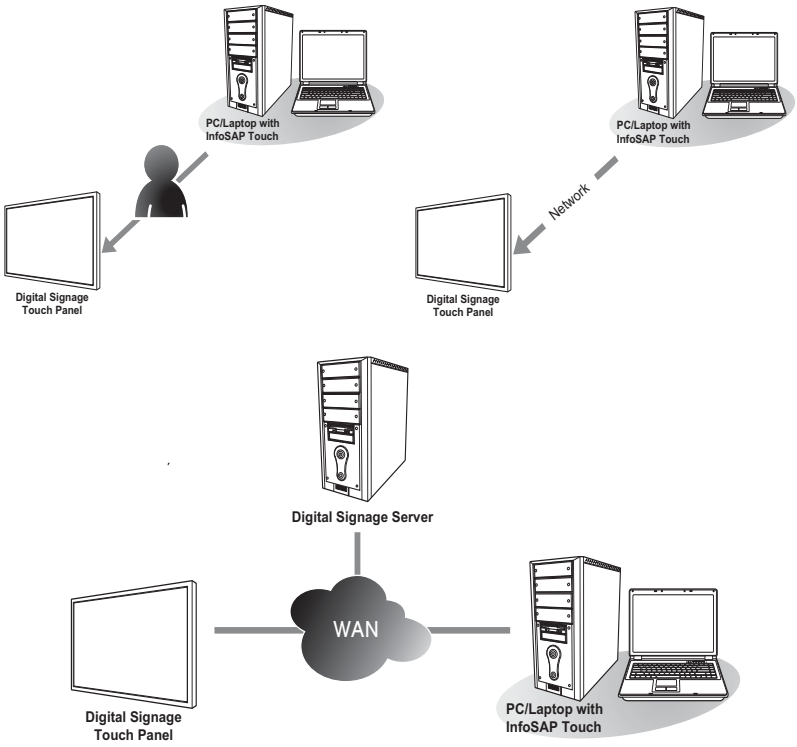
Note Please refer to *“ Slide Show” on page 22* for details on how to enable Slide Show mode.

Updating Content

DSTP supports three methods for content update:

- USB flash drive update
- Manual rewrite of SD card by PC
- Remote rewrite through LAN
- Remote rewrite through WAN

The illustration below shows the different content update methods.



USB Flash Drive Update

A **media** folder is required for a USB flash drive update. It must contain the following three files:

- Playlist file (.lis)
- Program files (.xml)
- Media folders (named the same as the .xml file)

You can create content by using InfoSAP Touch.

There are two modes for USB update:

1. Mode 1: Delete and copy mode. All content files in the media folder are deleted. The content files in the USB flash drive are then copied to the SD card.
2. Mode 2: Differential copy mode. The file name and date of the files in the USB flash drive and the SD card are compared. Only files with different names and/or dates are copied to the SD card. If there are files in the USB flash drive and the SD card with the same file name and date, they are skipped. If the files in the SD card do not exist in the USB flash drive, they are deleted.

Manual rewrite of SD card by PC

You can create programs and playlists using InfoSAP Touch and manually rewrite the contents of the SD card using a PC. After creating a playlist in InfoSAP Touch, the following items appear:

- Playlist file (.lis)
- Program files (.xml)
- Media folders (named the same as the .xml file)

Before you start to copy, check to make sure your SD card contains a folder named “media”. If not, create “media” folder. Now, manually copy the files to your SD card’s “media” folder using your PC’s copy/paste functions.

For more information about creating a playlist, please see the InfoSAP Touch user manual.

Rewrite through LAN

You can directly upload playlists to DSTP using InfoSAP Touch. See the InfoSAP Touch user manual for more information.

Rewrite through WAN

1. Using the DS-Server (optional)

You can upload playlists to DSTP using the DS-Server. See the DS-Server user manual for more information. The DS-Server provides enhanced Internet functionality. Contact your channel provider for more information.

2. Auto content update

You can set auto content update to DSTP using InfoSAP Touch. See the InfoSAP Touch user manual for more information.

Specifications

Internal Storage

DSTP uses an SD card for internal storage. The SD card must have only one FAT32 partition. DSTP supports SD cards with capacities up to 16GB.

SD card structure

The SD card must have the following files and folders:

1. System Driver (.img), includes:
    - Applications
    - Libraries
    - Upgrader
2. **Media** folder, contains:
    - Only one Playlist file (.lis)
    - One or more set of Program Files and Program Folders.
        - Each Program File has one (.xml) file and one folder, respectively
        - Program Folders may include the following:
            - image files, videos files, ticker data, or fonts

3. **Config** folder. This folder is automatically created.
4. **Ds-player** folder. This folder is automatically created.
5. **Upgrade** folder. This folder is automatically created.

Configuration File

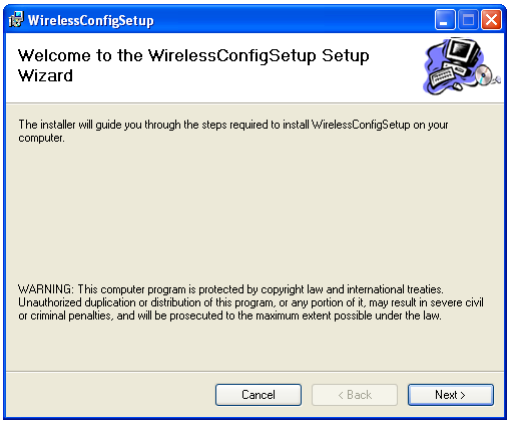
The configuration file is formatted in XML and named **config.dat**. If a **config.dat** file is present in the inserted USB flash drive, the settings are read during boot-up. The device then reboots for the settings to take effect.

Wireless/3G Config Setting

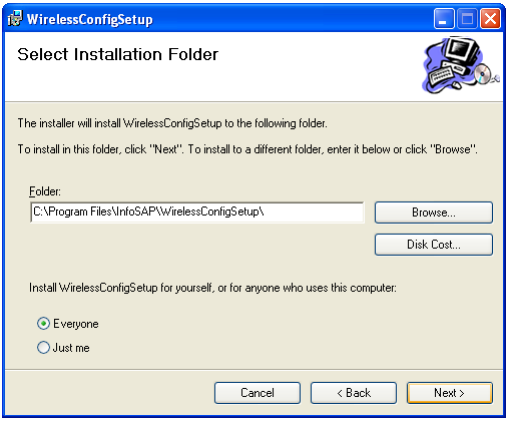
To connect to the network via wireless or 3G connection, install the Wireless/3G Config Setting tool on your PC and use it to create the configuration file.

To Install Wireless/3G Config Setting

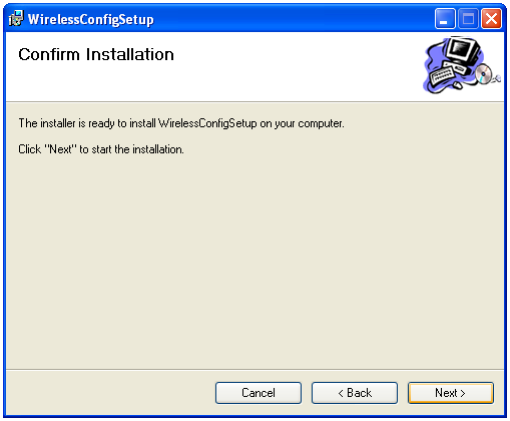
1. Download the tool from the manufacturer's website.
2. Double-click the setup file.
3. Click **Next** to continue.


WirelessConfigSetup
Welcome to the WirelessConfigSetup Setup Wizard
The installer will guide you through the steps required to install WirelessConfigSetup on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

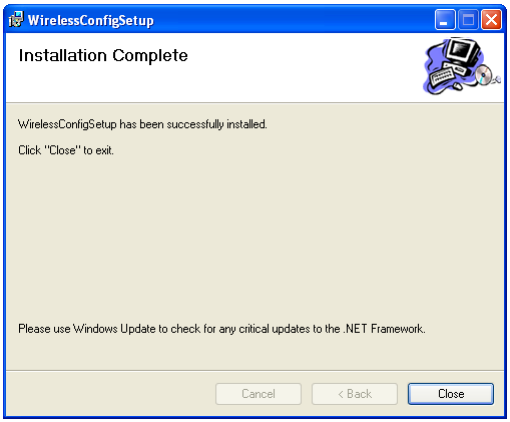
4. Browse for the destination folder, then click **Next**.


WirelessConfigSetup
Select Installation Folder
The installer will install WirelessConfigSetup to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\InfoSAP\WirelessConfigSetup\
Browse...
Disk Cost...
Install WirelessConfigSetup for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

5. Click **Next** to continue.

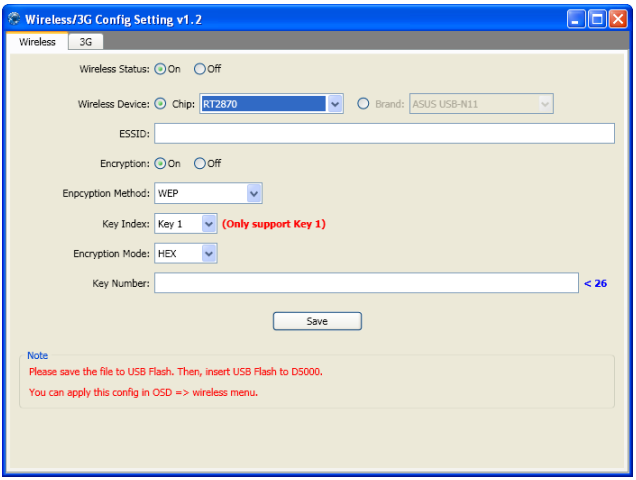

WirelessConfigSetup
Confirm Installation
The installer is ready to install WirelessConfigSetup on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

6. When done, click **Close**.



To Create Wireless Configuration File

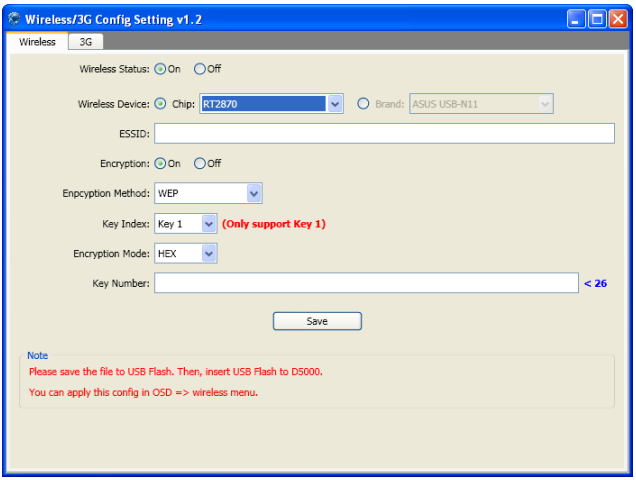
1. Insert a USB flash drive into the PC's USB port.
2. On your PC, click **Start** > **All Programs** > **WirelessConfigSetting** > **WirelessConfigSetting**.



3. Click the **Wireless** tab.
4. On **Wireless Status**, select **On**.
5. On **Wireless Device**, select your device model from the box.
6. Enter the **ESSID**.
7. On **Encryption**, select **On** or **Off**. If **Encryption** is **Off**, skip to step 8.
8. If **Encryption** is On, select the **Encryption Method** and **Encryption Mode**.
9. Enter the **Key Number**.
10. Click **Save**.
11. Browse for the location of the USB flash drive. By default the file is named config.dat. To change, enter desired filename.
12. Click **Save**.

To Create 3G Configuration File

1. Insert a USB flash drive into the PC's USB port.
2. On your PC, click **Start** > **All Programs** > **WirelessConfigSetting** > **WirelessConfigSetting**.



3. Click the **3G** tab.
4. On **USB Modem Status**, select **On**.
5. On **Modem Model**, select your device model from the box.
6. Enter the **PIN Number**.
7. Enter the **Dial Number**.
8. Click **Save**.
9. Browse for the location of the USB flash drive. By default the file is named config.dat. To change, enter desired filename.
10. Click **Save**.

Supported Image Formats

DSTP supports BMP, PNG, and JPEG image file formats.

- BMP (*.bmp): 24-bpp, R8-G8-B8
- PNG (*.png): 24-bit RGB
- JPEG (*.jpg, *.jpeg)

Image resolution should be less than 2047 x 2047.

Supported Video and Audio Formats

Please refer to the table below for video and audio formats supported by DSTP.

Table 1: Supported Video and Audio Format

Group	Video(V) Audio(A)	Codec	Container	File Extension
WMV	V	Windows Media Video 9	ASF	.WMV, .ASF
	V	Windows Media Video 9 Advanced Profile		
	A	Windows Media Audio 9		
MPEG-1	V	MPEG-1 Video	MPG	.MPG
	A	MPEG-1 Audio layer 2		
MPEG-2	V	MPEG-2 Video	MPG, M2P	.MPG, .M2P
	A	MPEG-1/2 Audio layer 2	M2V	.M2V
	A	MPEG-1/2 Audio layer 3		
	A	AC-3		
MPEG-2	V	MPEG-2 Video (Transport Stream)	TS	.TS
	A	MPEG-1/2 Audio layer 2		
	A	MPEG-1/2 Audio layer 3		
	A	AC-3		

Table 1: Supported Video and Audio Format

Group	Video(V) Audio(A)	Codec	Container	File Extension
MPEG-2	V	MPEG-2 Video (Program Stream)	VOB	.VOB
	A	MPEG-1/2 Audio layer 2		
	A	MPEG-1/2 Audio layer 3		
	A	AC-3		
MPEG-4	V	DivX 5.0	DivX, AVI	.DivX, .AVI
	A	MPEG-1/2 Audio layer 2		
	A	MPEG-1/2 Audio layer 3		
	A	AC-3		
MPEG-4	V	H.264	MOV, AVI, TS	.MOV, .AVI, .TS
	A	AC		
MPEG-4	V	MP4	MP4	.MP4
	A	AAC		
VC-1	V	VC-1	TS	.TS
	A	AC-3		

Video and Audio Specifications

1. Windows Media Video 9 (WMV3)
   - Supports MP@HL (Main Profile, High Level)
   - Does not support CP (Complex Profile)
   - Does not support interlaced mode
   - Does not support sprite mode
   - Does not support files encoded using WMV9 BETA
   - Does not support WMV1 OR WMV2
   - Supports elementary video stream bit rate of SDTV (HDTV) up to 20 (35) Mbps
2. Windows Media Video 9 Advanced Profile (WMVA, VC-1, WVCI)
   - Supports MP@HL (Main Profile, High Level)

- Supports AP@L3 (Advanced Profile, L3 Level)
- Does not support CP (Complex Profile)
- Does not support interlaced mode
- Does not support sprite mode
- Does not support files encoded using WMV9 BETA
- Does not support WMV1 OR WMV2
- Supports elementary video stream bit rate of SDTV (HDTV) up to 20 (35) Mbps

3. MPEG-2 Video (MP2V, MPV2, MP2P, MP2T)
   - Supports MP@HL (Main Profile, High Level)
   - Supports low delay mode (no B pictures, no frame reordering delay, handling of VBV underflow)
   - Supports an elementary video stream bit rate for SDTV (HDTV) up to 20 (35) Mbps
4. DivX 5.0 (DX50), MP4 (MP4V), H.264
   - Supports BP@L3 (Baseline Profile, L3 Level) up to 720x480p30 or 720x576p25 resolution, including FMO and ASO
   - Supports MP@L4.0 (Main Profile, L4 Level)
   - Supports HP@L4.0 (High Profile, L4 Level)
   - Supports up to 180 Mbit/s for CABAC streams
   - Supports up to 135 slices per frame
   - Supports an elementary video stream bit rate for SDTV (HDTV) up to 20 (35) Mbps
5. MPEG-1/2 Audio layer 2, MPEG-1/2 Audio layer 3
   - Layer 2: supports bit rates up to 384kbps
   - Layer 3: supports bit rates up to 320kbps
   - Supports up to 2.0 channels
   - Supports 16-bit and 24-bit samples
   - Supports sampling rates of 32, 44.1 and 48 kHz
6. Windows Media Audio 9 (WMA3, codec id:0x161), Windows Media Audio 9 Professional (codec id:0x162)
   - Supports up to 2.0 Windows Media Audio 9 channels
   - Supports up to 5.1 Windows Media Audio 9 Professional channels
7. AC-3 (Dolby Digital)
   - Supports bit rates to 640kbps
   - Supports up to 5.1 channels

- Supports 16-bit and 24-bit samples
- Supports sampling rates of 32, 44.1 and 48 kHz

8. AAC (MPEG-4 AAC)
   - Supports LC (Low Complexity profile)
   - Supports bit rates up to 384kbps
   - Supports up to 5.1 channels
   - Supports 16-bit and 24-bit samples
   - Supports sampling rates of 32, 44.1 and 48 kHz
9. Streaming
   - Video: MPEG1, MPEG2, MP4v, XVID, DIVX, DX50
   - Audio: AC3, PEG layer 1/2/3

Software Layout Utility

A software layout utility called InfoSAP Touch (on the CD-ROM) is included when you purchase DSTP. This windows application is used to create programs and playlists for DSTP. With this software, you can specify the layouts and content files to playback. It allows you to do the following:

- Define layouts using default layout templates or blank layouts
- Assign content to layouts
- Create signage
- Preview layouts
- Create programs and playlists
- Upload playlists through LAN/WAN
- Set auto upload parameters
- Specify video rotation

For more information, please check the InfoSAP Touch user manual included in the CD-ROM.

You can also purchase DS-Server for more powerful Internet functionality.

Layout Template

DSTP supports different types of layouts. Following are some examples:

- Image only
- Image + Ticker
- Video + Ticker
- Video + Image + Ticker
- Portrait

You can also manually add layers.

Image Only

In an Image only layout, images are shown on screen in Loop play mode. Audio files can be played at the same time.

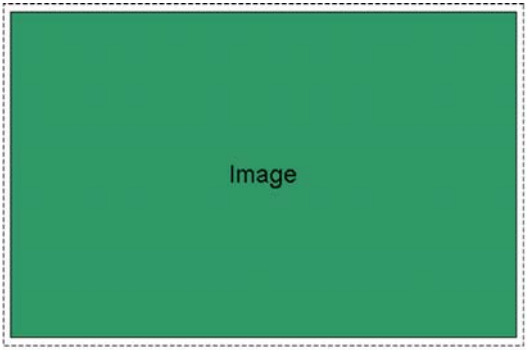
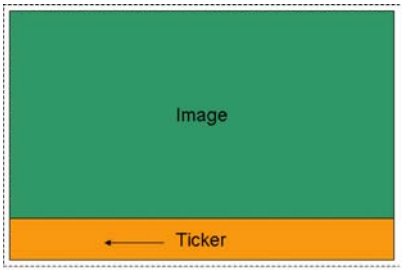
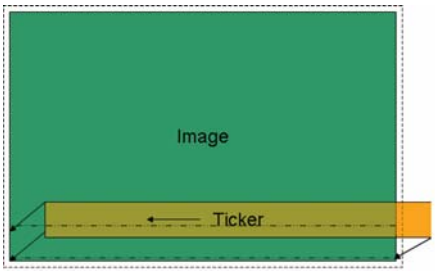


Image + Ticker

In an Image + Ticker layout, there is no character quantity limitation. The ticker, (in Unicode characters), runs from right to left, or can have sentences scrolling upward or downward. Images and the ticker can be overlapped. Audio files can be played at the same time.



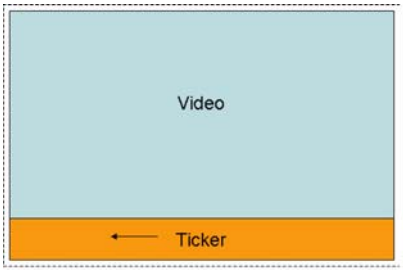
No overlap.



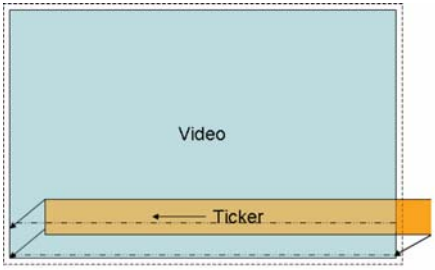
Overlapped. Image and ticker are transparent.

Video + Ticker

A layout can contain a video file and a ticker. The video file can be from an SD card, composite input, or network streaming (See and follow steps 1-3 of *" Manual rewrite of SD card by PC" on page 33* to setup streaming video). The video and the ticker can be overlapped.



No overlap.



Overlapped. Video and ticker are transparent.

Note

If you add an audio file and a video file, the audio source is set to audio automatically. The video file's audio track will not be audible.

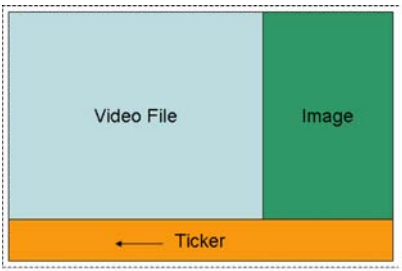
Video + Image + Ticker

A layout can contain a video file, an image and a ticker. The video file can be from an SD card, composite input, or network stream.

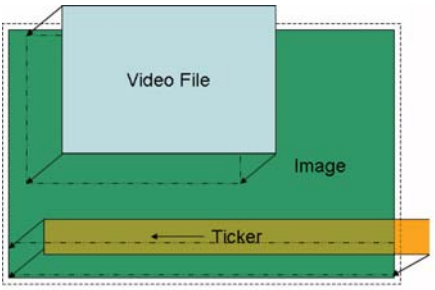
Note

If you add an audio file and a video file + image+ticker, the audio source is set to audio automatically. The video file's audio track will not be audible.

The video, image and ticker can be overlapped.

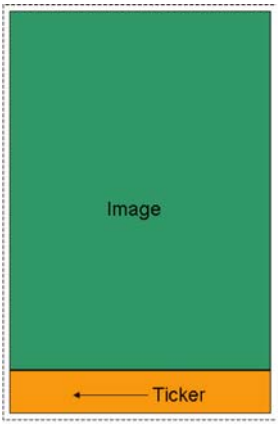


No overlap.



Overlapped. Image and ticker are transparent.

Portrait Mode



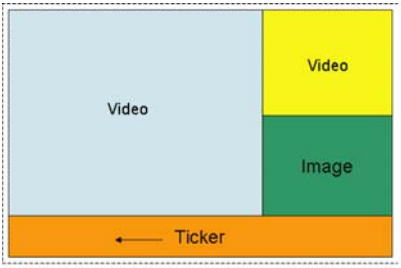
The Portrait Mode layout can contain a video file, an image, and a horizontal ticker. The ticker direction is from right to left. There is no character limitation. Audio files can be played at the same time.

- If user add an audio file, the audio source will be set to audio automatically.
- Before you start to copy, check to make sure your SD card contains a folder named “media”. If not, create “media” folder. Now, manually copy the files to your SD card’s “media” folder using your PC’s copy/paste functions.

Video (2) + Image + Ticker

DSTP supports playback of 2 videos, an image and a ticker. Possible video combinations include:

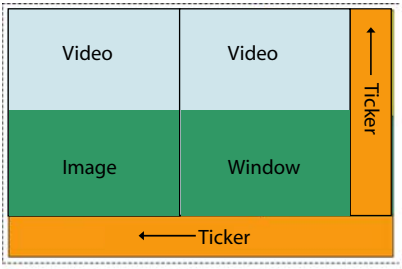
- Video file + S-Video input
- Streaming + S-Video input
- Video file + Streaming



Vertical Ticker

DSTP supports playback of 2 videos, weather images, and 2 tickers. Possible video combinations include:

- Video file + S-Video input
- Streaming + S-Video input
- Video file + Streaming



The processor can play weather from RSS, only Yahoo Weather.rss (http://weather.yahoo.com) is supported.

Note Vertical Ticker only supports Chinese, Japanese and Korean.

Software Limitations

To ensure the output quality of DSTP, take note of the following software limitations.

Media file

- The maximum video/audio file size is 4GB.
- Two images + Two tickers + Two video files may be shown simultaneously.
- If the total of image areas is over 3/4 WXGA:
  *One image + Two tickers + Two video files may be shown simultaneously.
- If WMV or MPEG video bitrate is 6 ~ 16 Mbps:
  *Two images + One ticker + One video file may be shown simultaneously.
- If an H.264 file is inserted:
  *One image + One ticker + One video file support.
- The Maximum URL length for an RSS feed in a program file is 256 bytes.
- The maximum font file name length in a program file is 128 bytes.
- The Maximum duration of a frame is 24 hours.

Note The Program file refers to .xml files.

Program file (.XML)

- The maximum source number in an item group is 100.
- The maximum number of item groups in a frame is 100.
- The maximum program name length is 128 bytes.

Playlist file (.LIS)

- The maximum number of program and control commands in a playlist file is 500.

System Driver

- The maximum system driver filename length is 128 bytes.
- The on-screen display can only display 35 files or folders in a directory on the USB flash drive. Be sure the folder containing the system drivers has fewer than 35 files or folders.

Filename:
System driver: lib-xxx.img
Kernel: knl-xxx.bin
Loader: ldr-xxx.bin
Splash: sph-xxx.bin

Processor name

- The maximum processor name length is 64 bytes, alphanumeric.

Image / Video quality

If an image or video file with 1680 x 1050 resolution is played back on a display with 1680 x 1050 resolution, scaling is not done.

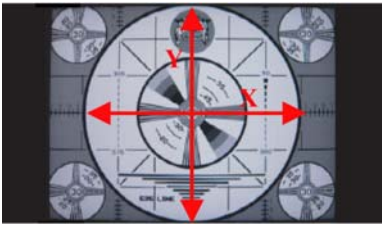
Gamma and Luminance Characteristics

Gamma and luminance settings can be adjusted using the display function. DSTP is adjusted to display normally on a grayscale test pattern.

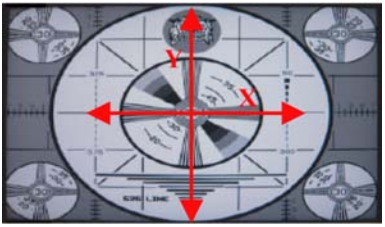
Video Input

There are two video input modes: Normal mode and Full Screen mode. Normal mode has an aspect ratio of 1:1.

The native resolution video input for NTSC is 720 x 480, while PAL is 720 x 576.
Normal mode is automatically set for 640 x 480 and 1024 x 768 resolutions.
If the resolution is 1680 x 1050 or 1280 x 1024, you have to choose between normal and full screen mode.



Normal Mode. Aspect ratio of 1:1 (X=Y)



Full Screen Mode.

You can change the desired mode in the Play Mode submenu. See *" Play Mode" on page 21*.

Hardware Specifications

Processor	CPU: Sigma SMP863X 8 MB Flash memory 256 MB SDRAM
Video Output Resolution	1680 x 1050 / 60Hz
Video Input	Connector: Composite
Audio Output	Analog stereo line out Line out L/R x 1, Stereo 3.5 Φ mini jack
Audio Input	Line in L/R x 1, Stereo 3.5 Φ mini jack
Network	RJ45 x 1 (DHCP, HTTP) No wake on LAN function
USB	USB 2.0 Host x 2 USB mass storage class for USB flash drive only
Storage interface	SD card I/F x 1 (SDHC) Max capacity: 16Gbyte
Storage	SD card
IR input for remote control	38khz carrier, NEC format signal
Communication interface with display	RS232 (TX and RX), 9 pin x 1
Wired IR input	Mini jack: 2.5 Φ (4 pole) Alternative to IR input
Power LED	Operation: GREEN Standby: RED
Power button	Power On/Off
AC adapter	Input AC 100~240V, 50-60hz, 1.5A Output DC 12V 6.67A
Power code	EUR, 1800mm
Power Consumption	Power on: 64W (80W max) Standby: 1W max
Weight	6.9 kg 0.5 ± 0.5 kg
Temperature	Operating: 0~40 ºC Storage: -20~60 ºC
Humidity	Operating: 20~80% Storage: 10~90%

Troubleshooting

Error Messages

This section lists common error messages that may arise during the use of DSTP, and provides answers and solutions to these errors.

Error Message	Solutions
“It failed to access the SD card.”	• Check if the SD card is inserted. • The SD card may be damaged. Replace it with a new one.
Displays the error messages “Library (.img) file is not found.” and “It is recovering library file now. Please DO NOT turn off power.” at the same time	• No library file (System Driver) is available on the SD card. DSTP is attempting to recover the system driver. Please wait until recovery is complete.
Displays the error messages “It failed to recover library (.img) file” and “There is no library file in the memory card.” at the same time.	• Recovery of library file failed. Re-copy the system driver from the CD-ROM to the SD card.
“It failed to access the program file (.xml)”	• Check to make sure that the SD card contains the necessary media files. • Make sure that all program and schedule files are saved under the *media file* directory.
“SD card is write protected.”	• Please unlock the SD card.

FAQ's

This section lists some frequently asked questions (FAQ) and the answers to these problems.

Question	Answer
Why can't I view my video files?	You may be trying to view a video file that is not supported by DSTP. See *"Supported Video and Audio Formats" on page 40.*
Why can't I play my music files?	You may be trying to play a music file that is not supported by DSTP. See *"Supported Video and Audio Formats" on page 40.*
How do I restore DSTP to its default factory settings?	1. From DSTP OSD Menu>System, select the "Factory Reset" option. 2. Press and hold the reset button and power on DSTP until the LED blinks and stays green. 3. Power off DSTP and press **Power on**, **7**, **8**, **5** on the remote controller in sequence.
What should I do if DSTP stops functioning or crashes?	Press STANDBY and POWER ON on the remote control.
I can't turn on the device.	The batteries on the remote control may be depleted. Replace the batteries.